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09/423,454

11/08/1999

ROBERT KUTKA

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07/11/2006

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EXAMINER

WONG, ALLEN C

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/423,454

Applicant(s)

KUTKA ET AL.

Examiner

Allen Wong

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28,30-34,37-39,41,44,45,47-49 and 51 is/are allowed.
- 6) ☒ Claim(s) 27,29,35,36,40,42,43,46,50 and 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 4/18/06 have been fully considered but they are not persuasive.

Regarding lines 8-9 and 17-22 on page 2 of applicant's remarks, applicant asserts that Wober does not disclose the grouping of picture elements, and that there is no reason to combine Wober and Yuan together. The examiner respectfully disagrees. In figure 9, Wober teaches that at output d, there are at least two picture elements grouped together by the adder to produce the output d (image segment). Also, adders are there to produce the output e (image segment) and output g (image segment), in that these outputs are grouped to at least two picture elements based on a mathematically defined region produced by a mathematical process of filtering from the digitized image itself. Then, in figure 9, Wober discloses there are at least one picture element where at the output d, there are three picture elements that are circled to indicate the grouped picture elements, and the uncircled picture elements are the at least one ungrouped picture elements from the one area of the image located between image segments.

Thus, Wober discloses the limitation of "grouping all except at least one picture elements of said digitized image into a number of image segments based on a mathematically defined region of said digitized image derived solely from said digitized image itself, said at least one ungrouped picture element being from at least one area of said image located between image segments". Wober does not disclose the specifics

Art Unit: 2621

of encoding only said picture elements being grouped into an image segment.

However, in column 3, lines 43-49 and col.4, ln.31-57, Yuan discloses that the pixels or picture elements form the 8x8 pixelated data block or image segment for intraframe coding. Thus, the picture elements are grouped and encoded, thereby encoding only the picture elements being grouped into an image segment.

In response to applicant's argument that there is no reason or suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wober and Yuan, as a whole, for efficiently encoding image data in a high quality manner so as to reduce image artifacts and distortions, as disclosed in Yuan's column 1, lines 30-40.

Thus, the rejection of claims 27, 29, 35, 36, 40, 42, 43, 46, 50 and 52 is maintained.

Claims 28, 30-34, 37-39, 41, 44, 45, 47-49 and 51 are still patentable over the prior art.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 27, 29, 35, 36, 40, 42, 43, 46, 50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wober (5,748,792) in view of Yuan (5,367,385).

Regarding claims 27 and 43, Wober discloses a method for encoding a digitized image having picture elements, said method comprising the steps of:

grouping all except at least one picture elements of said digitized image into a number of image segments based on a mathematically defined region of said digitized image derived solely from said digitized image itself, said at least one ungrouped picture element being from at least one area of said image located between image segments (fig.9, note at the output d, there are at least two picture elements grouped together by the adder to produce the output d (image segment), and also, there are adders that produce output e (image segment) and output g (image segment) that group at least two picture elements based on a mathematically defined region produced by a mathematical process of filtering from the digitized image itself, and also note in fig.9, there are at least one picture element where at the output d, there are three picture elements that are circled to indicate the grouped picture elements and the uncircled picture elements are the at least one ungrouped picture elements from the one area of the image located between image segments).

Wober does not specifically disclose encoding only said picture elements being grouped into an image segment. However, Yuan teaches encoding the picture elements being grouped into an image segment (col.3, ln.43-49, col.4, ln.31-57; Yuan discloses that the pixels or picture elements form the 8x8 pixelated data block or image segment for intraframe encoding, thus, the picture elements are grouped and encoded). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wober and Yuan, as a whole, for efficiently encoding image data in a high quality manner so as to reduce image artifacts and distortions (col.1, ln.30-40).

Note claims 35-36 and 46 have similar corresponding elements.

Regarding claim 29, Wober discloses the filtering of images (fig.1B, 24).

Regarding claims 40, 42, 50 and 52, Wober discloses the use of MPEG encoding (col.4, ln.60-63). Wober does not specifically disclose motion compensation. However, it is well known to one of ordinary skilled that motion compensation is used in MPEG encoding. Further, Yuan also discloses motion compensation (fig.1, 23).

### ***Allowable Subject Matter***

3. Claims 28, 30-34, 37-39, 41, 44, 45, 47-49 and 51 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not specifically disclose the combination of limitations: inserting new picture elements corresponding to said non-encoded picture elements of said encoded image in said second arrangement in an area between said decoded segments; interpolating said area between said image segments in said second arrangement; and allocating encoding information resulting from said interpolating to

Art Unit: 2621

said new picture elements, used together with all of the other limitations of independent claim 28. Independent claim 44 is patentable for similar reasons as claim 28.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

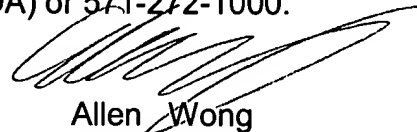
### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Wong  
Primary Examiner  
Art Unit 2621

AW  
6/27/06